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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Quirin Sterner

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Novak Druce & Quigg LLP
1300 I Street NW
Suite 1000 West Tower
Washington, DC 20005

EXAMINER

MCCALL, ERIC SCOTT

ART UNIT

PAPER NUMBER

2855

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,530	Applicant(s) STERNER, QUIRIN	
	Examiner Eric S. McCall	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 11-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

**METHOD FOR DETERMINING ADDITIONAL FUEL
CONSUMPTION IN A MOTOR VEHICLE AND METHOD
FOR DISPLAYING ADDITIONAL FUEL CONSUMPTION**

NON-FINAL OFFICE ACTION

This action is in response to the Applicant's Request for Continued Examination with amendment dated March 18, 2010.

CLAIMS

35 U.S.C. § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3, 5, 7, and 11-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention.

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Amended claim 1 now sets forth, not only in the preamble but in the body of the claim, the limitation of “determining the fuel consumption of at least one electrical consumer” which is indefinite, for the limitation is inconsistent with the Applicant’s specification.

The Examiner points out that the electrical consumer does not consume fuel but instead the use of the electrical consumer may vary the fuel consumption *of the engine*.

Added claims 11 and 12 are indefinite for the same reasons.

With respect to claims 7 and 16, the claims reference “the input quantities”, however such quantities have not been previously set forth. Thus, uncertainty exists as to the meaning thereof.

Amended claims 4, 6, and 7 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which the Applicant regards as their invention. Evidence that claims 4, 6, and 7 fail to correspond in scope with that which the Applicant regards as the invention can be found in the reply filed March 18, 2010. In that paper, the Applicant has stated that independent claims 4 and 6 have been amended to “make clear these claims do not require determining the fuel consumption of an electrical consumer”.

However, the Applicant’s disclosure is clearly directed to an invention in which the effects on the fuel consumption of an engine are determined when an electrical consumer connected to the engine via a generator is operated. Even the title of the patent application is

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directed to determining fuel consumption.

Furthermore, the entire prosecution history, including all prior art searching, centers around the determining of fuel consumption when such electrical consumers are used.

35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5, 6, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers (5,397,991).

Rogers suggests a method for determining variations in the engine fuel consumption due to an electrical consumer in a motor vehicle wherein the electrical consumer is supplied by a generator and the generator is driven by the engine, comprising

monitoring fuel consumption based on the load placed on the engine by the alternator wherein the alternator current is indicative of the load (for example, see col. 5, lines 24-31).

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Rogers fails to explicitly set forth the determining of at least one current value of the generator mechanical power input upon energization of the electrical consumer to determine the fuel consumption as claimed.

However, it would have been obvious to one having ordinary skill in the art armed with said teaching to determine a current value of the generator mechanical power input.

The motivation being that since Rogers sets forth the increasing and decreasing of the input current to the alternator effects the fuel consumption, monitoring and thus decreasing the current will decrease fuel consumption.

With respect to claims 2 and 5, determining a value of power from a known value of current would be within the realm of one having ordinary skill in the art.

With respect to claim 6 (and claim 15), the above comments which pertain to claim 1 also pertain to claim 6 since claim 6 parallels that of claim 1. In addition, claim 6 sets forth that “mechanical and electrical losses are taken into account when *the value* is being determined for the mechanical power input on the generator”. Since claim 6 earlier sets forth that a current value of a mechanical power input of the generator is determined, “the value”, as set forth above, is interpreted as being the current value.

As such, mechanical and electrical losses would be taken into account in Rogers as is claimed because Rogers also teaches a current value.

Allowable Subject Matter

Claims 4 and 7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claims 3, 11-14, and 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response To Arguments

The Applicant's arguments have been considered but have not been found to be persuasive. With respect to claim 1, the Applicant argues that determining the current to an alternator is not the same as determining the fuel consumption of an electrical consumer and that Rogers does not suggest determining such fuel consumption. The Examiner disagrees in that an electrical consumer does not consume fuel and that Rogers not only determines the current to the alternator, but teaches that the current effects the fuel consumption and that lower alternator current equates to lower fuel consumption.

CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric S. McCall whose telephone number is (571) 272-2183.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Eric S. McCall/
Primary Examiner
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